

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

1) Page 8, line 20 – page 9, line 11:

“Reference is once again made to **Figure 2**, wherein control interface **105** is shown. In addition to the logic described above, control interface **105** further includes write cycle decode logic **112** and read cycle decode logic **114**. Write cycle decode logic **112** receives read/write control signals **124** as input, and outputs write control signal **125** to IC **100** based upon the operational mode specified by mode control signal **130**. For example, if mode control signal **130** indicates one mode of operation, write cycle decode logic **112** will output a write control indication on write control line **125** when both a transfer start indication and a write indication are present on read/write control bus **124**. Similarly, if mode control signal **130** indicates another mode of operation, write cycle decode will output a write control indication on write control line **125** when a mere write strobe is present. The read cycle decode logic receives read/write control signals **124** as input, and outputs read control signal **127** to IC **100** also based upon the operational mode specified by mode control signal **130**. For example, if mode control signal **130** indicates a first mode of operation, read cycle decode will output a read control indication on read control line **127** when both a transfer start indication and a read indication are present on read/write control bus **124**. Similarly, if mode control signal **130** indicates a second mode of operation, read cycle decode will output a read control indication on read control line **127** when a mere read strobe is present.”

2) Page 10, lines 4-16:

“In one embodiment of the invention, mode control signal **130** represents two control signals enabling four independently programmable operating modes for control interface **105**. For example, a first control signal is used to select between a first operating mode whereby multiplexed address and data signals are received on host address/data bus **120**, and a second operating mode whereby ~~addresses are~~ data is received on host address/data bus **120** and ~~data-address~~ signals are received on separate host address bus **122**. Similarly, a second control signal is used to select between a third operating mode whereby a transfer start indication is used in

cooperation with a read/write indication to signify the start of either a read or a write transaction, and a fourth operating mode whereby separate read and write strobes are used to signal the start of a read/write transaction. In accordance with one embodiment of the invention, each mode control signal may be independently set or cleared based upon the architecture of processor 102.”

3) Page 10, line 18 – page 11, line 5:

“**Figure 4** is a block diagram illustrating two operating modes for control interface 105, in accordance with one embodiment. The components depicted in **Figure 4** are functionally identical to their analogues of **Figure 2**, but have been redrawn for the purpose of clarity. In **Figure 4**, three signal paths have additionally been indicated by the encircled labels of (1), (2), and (3). In accordance with the teachings of the present invention, signal paths (1) and (2) together indicate signal paths that would be followed by data and addresses received from a processor utilizing a multiplexed address and data bus, assuming MUX 110 (and by extension control interface 105) is set via mode control signal ~~430~~130a to operate in a first operational mode. Signal paths (1) and (3) indicate signal paths that would be followed by data and addresses received from a processor utilizing separate data and address buses, assuming MUX 110 is set via mode control signal ~~430~~130a to operate in a second operational mode, for example. Accordingly, MUX 110 selects between two signal paths (e.g., (2) and (3)) based at least in part upon the architecture of the host processor.”

4) Page 12, lines 5-18:

“**Figures 6A-D** represent timing diagrams illustrating the various read and write cycle signaling of the host side of control interface 105, in accordance with various operational modes. **Figure 6A** is a timing diagram illustrating the operation of control interface 105 in accordance with a first operating mode where separate address and data bus is used in conjunction with transfer start and read/write signaling. **Figure 6B** is a timing diagram illustrating the operation of control interface 105 in accordance with a second operating mode where a multiplexed address and data bus is used in conjunction with transfer start and read/write signaling. **Figure 6C** is a timing diagram

illustrating the operation of control interface **105** in accordance with a ~~first~~third operating mode where separate address and data bus is used in conjunction with read/write strobes. **Figure 6D** is a timing diagram illustrating the operation of control interface **105** in accordance with a ~~second~~fourth operating mode where a multiplexed address and data bus is used in conjunction with read/write strobes.”